



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,207	04/16/2004	Randall E. Messick	100203807-1	7669

22879 7590 10/12/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

HOFFLER, RAHEEM

ART UNIT PAPER NUMBER

2169

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,207	MESSICK, RANDALL E.	
	Examiner	Art Unit	
	Raheem Hoffler	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections – 35 USC 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

In claims 1-2 and 4-8, the claimed invention is directed to non-statutory subject matter. Claims 1-2 and 4-8 provide no tangible results. Claim 3 do not appear to provide a useful, tangible, and concrete result. For example, the result of the “determining” and “identifying” claimed is not stated, sent, or otherwise used in the instant claims. It is suggested that the limitation of claim 3 be amended with independent claim 1.

In claims 21-27, the claimed invention is directed to non-statutory subject matter. The term “computer program product” is considered software. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In

contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Claim Rejections – 35 USC 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 incorrectly recites a "computer program product comprising a computer readable medium". Since a "computer program product" is considered software and the "computer readable medium" is considered hardware, it would be impossible to have the software consisting of a hardware component.

Claim Rejections – 35 USC 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 13 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kojima et al (USPG-Pub No. 20050076281A1).

As for Claim 13, Kojima et al teaches a message-based system for managing a storage area network (SAN) [0103], comprising: a management server (e.g., network

Art Unit: 2169

terminal; [0009-0011]) that monitors states of devices coupled to the SAN and sends alert messages based on the states ([0052][0096-0098]); and a message processor that receives the alert messages and sends notification messages (Fig. 6, 11), the message processor comprising: a receiver that receives the alert messages (Fig. 3 (225); e.g., error detection unit; ([0009-0011][0041])), a parser that analyzes the received alert messages (Fig. 3 (226); e.g., notification judgment unit; [0009-0011][0043])), a formatter/addresser that formats and addresses the notification messages, and a transmitter that sends the notification messages to messaging devices (Fig. 3 (224); e.g., notification unit; ([0009-0011][0042])).

Claim 28 differs from Claim 13 in that claim 28 is a system whereas claim 13 is a system claim. Thus, claim 28 is analyzed as previously discussed with respect to claim 13 above.

Claim Rejections – 35 USC 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-12, 14-27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al (USPG-Pub No. 20050076281A1) in view of Primm et al (US Patent No. 7095321B2).

As for Claim 1, Kojima et al teaches of a message-based method for managing a storage area network (SAN) [0103], comprising identifying a notification message (Fig. 11(a, b); [0006][0038][0096]), wherein the notification message provides information related to the state of the device (e.g., error detection unit, judgment unit; ([0009-0010][0042-0043])). Kojima et al failed to explicitly recite the limitations of receiving an alert related to a state of a device coupled to the SAN, parsing the alert to identify the state of the device, comprising: determining a problem category, and determining action options, consulting an action rules database, identifying action required in response to the identified state of the device. Primm et al teaches receiving an alert related to a state of a device (e.g., error condition objects; (col. 4, 37-47); parsing the alert to identify the state of the device (e.g., alert handling system; (col. 3, 26-29)(col. 6, 49- col. 7, 3)(col. 8, 16-23)(col. 9, 24-38)(col. 13, 40-43)), comprising: determining a problem category and determining action options (e.g., alert actions; (col. 8, 28-33)(col. 12, 20-24, 29-32)), comprising consulting an action rules database (e.g., alert profiles; (col. 6, 57- col. 7, 3)(col. 12, 34-41, 51-54)); identifying action required in response to the identified state of the device (e.g., action handlers; (col. 9, 58- col. 10, 65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined an alert monitoring and notification

Art Unit: 2169

system and method as taught by Primm et al with the network terminal that notifies the administrator of error as taught by Kojima et al because an improved monitoring, alert processing and notification system and method would broaden functionality, address severity of an error, and enhance response times for system maintenance (Primm et al (col. 1, 24-58)

As for Claim 9, Kojima et al teaches a method for managing a storage area network (SAN) [0103], wherein a message processor receives alerts from a management server and sends notification messages (Fig. 11(a, b), Fig. 16 (s55); [0006][0038][0096]) to SAN operators ((e.g., administrator, ([0096][0098-0099][0105]))). Kojima et al also teaches of identifying an operator to receive a notification message (e.g., administrator, ([0096][0098-0099][0105])). Primm et al clearly teaches of monitoring states of devices (Fig. 3 (106); e.g., monitoring system; (col. 1, 64- col. 2, 4)(col. 14, 40-45)); receiving an alert when a state of a device indicates a problem (e.g., alert actions; (col. 8, 28-33)(col. 12, 20-24, 29-32)). In addition, Primm et al teaches determining if the alert is understood, wherein if the alert is not understood, the message processor sends a return message to the management server (e.g., alert handling system; (col. 3, 26-29)(col. 6, 49- col. 7, 3)(col. 8, 16-23)(col. 13, 40-43)); identifying a device subject to the alert, identifying a problem as indicated by the alert, identifying action steps for responding to the problem (e.g., alert actions; (col. 8, 28-33)(col. 12, 20-24, 29-32)), and formatting and sending the notification message (e.g., action handlers; (col. 9, 58- col. 10, 65)(col. 13, 40-43)). The alert handling system

Art Unit: 2169

determines if that alert has been understood and processed through recognition of the data it has received from the error object. A proper response would be chosen afterwards.

Claim 21 differs from Claim 1 in that claim 21 is a computer program product whereas claim 1 is a method claim. Thus, claim 21 is analyzed as previously discussed with respect to claim 1 above.

As for Claim 2, Kojima et al teaches identifying an operator of the SAN to receive the notification message (e.g., administrator, ([0096][0098-0099][0105])).

As for Claim 3, Kojima et al teaches sending the notification message to the operator (Fig. 17 (s64); [0093-0099]).

As for Claim 4, Kojima et al teaches waiting on a response message from the operator [0097-0100]. Primm et al teaches of directing performance of one or more action steps (e.g., action handlers) and directing execution of the action steps (Fig. 3 (110); e.g., alert handling system; (col. 3, 26-29)(col. 6, 49- col. 7, 3)(col. 8, 16-23)(col. 9, 24-38)(col. 13, 40-43)(col. 9, 58- col. 10, 65)).

As for Claim 5, Kojima et al teaches the information in the notification message (Fig. 6; ([0006][0038][0096][0098])). Primm et al clearly teaches of including one or

more suggested action steps for execution (e.g., alert handling system; (col. 3, 26-29)(col. 6, 49- col. 7, 3)).

As for Claim 6, Primm et al teaches directing performance of one or more automatic action steps (Fig. 3 (110); e.g., alert handling system; (col. 3, 26-29)(col. 6, 49- col. 7, 3)(col. 8, 16-23)(col. 9, 24-38)(col. 13, 40-43)).

As for Claim 7, Primm et al clearly teaches the information includes a report of automatic action steps completed (e.g., displaying error conditions; (col. 11, 41-50)).

As for Claim 8, Primm et al teaches that notification messages are one of an e-mail message, a voice message and a voice-to-text message (e.g., action handlers; (col. 9, 58- col. 10, 65)).

As for Claim 10, Primm et al teaches identifying the problem comprises identifying a problem category (e.g., alert actions; (col. 8, 28-33)) and consulting an action rules database (e.g., alert profiles; (col. 6, 57- col. 7, 3)(col. 12, 34-41, 51-54)).

As for Claim 11, Primm et al teaches identifying action steps comprises determining if action is required, identifying the action, and determining if the action is automatic (e.g., alert profiles; (col. 6, 57- col. 7, 3)(col. A2, 34-41, 51-54)).

As for Claim 12, Primm et al teaches if the action is automatic, initiating the action (e.g., alert handling system; ((col. 6, 49- col. 7, 3)(col. 9, 24-38)).

As for Claim 14, Primm et al teaches an action rules database that specifies possible corrective actions (e.g., alert profile; (col. 6, 57- col. 7, 3), wherein the parser consults the database and uses a state of a device ((col. 4, 37-47)(col. 13, 25-39)(col. 14, 6-13)) to determine action options ((col. 8, 28-33)(col. 12, 20-24).

As for Claim 15, Kojima et al clearly teaches of the message processor (e.g., network terminal; [0009-0011]). Primm et al teaches of the possible corrective actions include actions to be initiated automatically (e.g., alert actions; (col. 8, 28-33)(col. 12, 20-24, 29-32)(col. 15, 3-13)).

As for Claim 16, Kojima et al teaches of requiring approval of a system administrator receiving a notification message (Fig. 21; [0008][0048-0055]). Primm et al teaches the possible corrective actions include action options, and wherein the notification message includes the action options ((col. 12, 20-24, 29-32)(col. 9- col. 10, 65)).

As for Claim 17, Primm et al teaches the formatter/addresser formats the alert messages for receipt by one or more of a Web browser, a mobile phone, and a

telephone (e.g., action handlers; (col. 9, 58- col. 10, 65)(col. 13, 40-43)).

As for Claim 18, Primm et al teaches the management server initiates automatic corrective action based on a monitored state of a device (e.g., alert handling system; ((col. 6, 49- col. 7, 3)(col. 9, 24-38)), and wherein a notification message indicates the action taken by the management server (e.g., error notification; (col. 11, 41-50)(col. 13, 25-39)(col. 14, 6-13)).

As for Claim 19, Primm et al clearly teaches the alert messages are e-mail messages ((col. 9, 65- col. 10, 8)(col. 10, 38-42)).

As for Claim 20, Primm et al teaches a lightweight directory access protocol (LDAP) database that specifies recipients of the alert messages and transmission modes and addresses (col. 4, 11-15).

Claims 22-27 differ from Claims 2-7 in that claims 22-27 are computer program products whereas claims 2-7 are method claims. Thus, claims 22-27 are analyzed as previously discussed with respect to claims 2-7 above.

Claims 29-32 differ from Claims 14-17 in that claims 29-32 are system whereas claims 14-17 are system claims. Thus, claims 29-32 are analyzed as previously discussed with respect to claims 14-17 above.

Conclusion

7. The prior art made of reference and not relied upon is considered pertinent to the applicant's disclosure.

Ledru et al (USPG-Pub No. 20040162843A1) teaches of a method, system and article of manufacture for evaluating an object.

Ginter et al (USPG-Pub No. 20050015624A1) teaches of event monitoring and management.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raheem Hoffler whose telephone number is (571) 270-1036. The examiner can normally be reached on 7:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

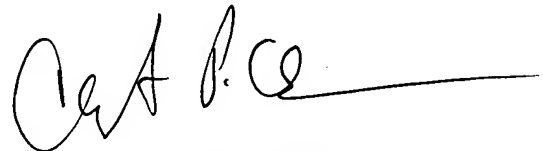
Art Unit: 2169

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RH



Raheem Hoffler



CHRISTIAN CHACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100